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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gunther Hesse

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CONNOLLY BOVE LODGE & HUTZ, LLP

P O BOX 2207

WILMINGTON, DE 19899

EXAMINER

AUGHENBAUGH, WALTER

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,901	<b>Applicant(s)</b> HESSE ET AL.	
	<b>Examiner</b> WALTER B. AUGHENBAUGH	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Acknowledgement of Applicant's Amendments***

1. The amendment made in claim 1 in the Amendment filed May 19, 2009 has been received and considered by Examiner.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The property to which Applicant intends to refer by the phrase "solution viscosity" is not adequately described in the specification: the pertinent art appears to use the phrase "solution viscosity" only when referring to a property having no units (which is referred to in the pertinent art as "solution viscosity" or "relative solution viscosity"), while the claim recites that the "solution viscosity" is less than 140 ml/g (which has units of ml/g). See, for example, USPN 7,491,792, USPN 7,049,391, and USPN 5,728,104.

In regard to USPN 7,491,792, see col. 4, lines 56-57 (which refers to the ISO 307 standard) and col. 8, lines 12-19 (also refers to the ISO 307 standard and discloses unit-less values).

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In regard to USPN 7,049,391, see col. 7, lines 1-4 (which refers to the ISO 307 standard) and Table 1 in col. 11 and 12 (the second column discloses unit-less values for solution viscosity [see terminology used at col. 7, lines 1-4]).

In regard to USPN 5,728,104, see col. 2, line 64-col. 3, line 9 (which refers to the ISO 307 standard and discloses unit-less values for relative solution viscosity).

Since Applicant's usage of terminology ("solution viscosity") and units (ml/g) appears to be inconsistent with the accepted conventions in the art for the reasons provided above ("solution viscosity" and "relative solution viscosity" do not have units of ml/g), clarification is required as to the nature of the property that Applicant intends to recite.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The new recitation "and the solution viscosity is less than 140 ml/g..." renders the claim indefinite because that which "the solution viscosity" is intended to refer cannot be ascertained.

It is unclear whether or not Applicant intends to refer to "the solution viscosity" of the plastic of the final product of the claim (which is "a mixture of at least two polyamides"), or if Applicant intends to refer to "the solution viscosity" of each of the polyamides separately (prior to being blended), or if Applicant intends to refer to "the solution viscosity" of only one of the polyamides prior to being blended. The fact that the "the solution viscosity..." recitation is a

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recitation in a product claim without any further description of what “the solution viscosity” is the viscosity of suggests that Applicant intends to refer to “the solution viscosity” of the plastic of the final product of the claim (which is “a mixture of at least two polyamides”). However, the fact that the claim recites that the polyamides have “different solution viscosity” suggests that Applicant might intend to refer to “the solution viscosity” of each of the polyamides separately (prior to being blended), or, alternatively, that Applicant might intend to refer to “the solution viscosity” of only one of the polyamides prior to being blended. Use of “the solution viscosity”, as opposed to “the solution viscosities”, makes it unclear if Applicant intends to refer to a plurality of polyamides: “the solution viscosity” strongly suggests only one viscosity.

Clarification and/or correction is required.

In further regard to claim 1, the exact property to which Applicant intends to refer by the phrase “solution viscosity” cannot be ascertained. The pertinent art appears to use the phrase “solution viscosity” only when referring to a property having no units (which is referred to in the pertinent art as “solution viscosity” or “relative solution viscosity”), while the claim recites that the “solution viscosity” is less than 140 ml/g (which has units of ml/g). See, for example, USPN 7,491,792, USPN 7,049,391, and USPN 5,728,104.

In regard to USPN 7,491,792, see col. 4, lines 56-57 (which refers to the ISO 307 standard) and col. 8, lines 12-19 (also refers to the ISO 307 standard and discloses unit-less values).

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In regard to USPN 7,049,391, see col. 7, lines 1-4 (which refers to the ISO 307 standard) and Table 1 in col. 11 and 12 (the second column discloses unit-less values for solution viscosity [see terminology used at col. 7, lines 1-4]).

In regard to USPN 5,728,104, see col. 2, line 64-col. 3, line 9 (which refers to the ISO 307 standard and discloses unit-less values for relative solution viscosity).

Since Applicant's usage of terminology ("solution viscosity") and units (ml/g) appears to be inconsistent with the accepted conventions in the art for the reasons provided above ("solution viscosity" and "relative solution viscosity" do not have units of ml/g), clarification and/or correction is required as to the exact property that Applicant intends to recite.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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7. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (USPN 6,228,912), as evidenced by Christ et al. (USPN 5,567,797).

In regard to claim 1, Campbell et al. teach a casing (housing) for an electronic device comprising a cathode-ray tube (col. 17, line 58-col. 18, line 21: Campbell et al. teach that the casing is suitable for use as a monitor housing [col. 18, line 9], and that computer monitors include cathode ray tubes [col. 17, line 65-67]). Campbell et al. teach that the casing comprises a heat-resistant, flame-retardant thermoplastic (see, for example, col. 1, lines 44-67), and that the casing is injection molded (see, for example, col. 17, lines 58-65). Campbell et al. teach that the thermoplastic material has a polyamide-based structure because Campbell et al. teach that a polyamide is a suitable component of the thermoplastic material (col. 2, lines 7-21). Campbell et al. teach that nylon-6 and nylon-6,6 are suitable polyamides for the thermoplastic material (col. 2, lines 7-20). Nylon-6 and nylon-6,6 have relative solution viscosities in sulfuric acid of 1.79 and 1.78, respectively, as evidenced by Christ et al. (col. 6, lines 22-23 and 47-48).

While Campbell et al. teach that for resinous compositions such as polyamide compositions, there is often an improvement in melt flow and/or other physical properties when one molecular weight grade of at least one resinous constituent is combined with a relatively lower molecular weight grade of similar resinous constituent (col. 6, lines 34-41, 46-56 and 62-66), Campbell et al. fails to explicitly teach an embodiment where the thermoplastic material comprises a mixture of at least two polyamides with different solution viscosities. Campbell et al. also do not explicitly teach an embodiment where a casing corresponding to the invention of Campbell et al. actually comprises a cathode-ray tube or a flat screen.

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However, since Campbell et al. teach that a polyamide is a suitable component of the thermoplastic material (col. 2, lines 7-21) and that for resinous compositions such as polyamide compositions, there is often an improvement in melt flow and/or other physical properties when one molecular weight grade of at least one resinous constituent is combined with a relatively lower molecular weight grade of similar resinous constituent (col. 6, lines 34-41, 46-56 and 62-66), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a blend of one molecular weight grade of at least one polyamide and a relatively lower molecular weight grade of another (similar) polyamide (such as nylon-6 and nylon-6,6) in order to improve the melt flow and/or other physical properties of the composition as taught by Campbell et al.

Furthermore, since Campbell et al. teach that the casing is suitable for use as housings for various electronic devices (col. 17, line 58-col. 8, line 21) such as a monitor housing (col. 18, line 9) and that computer monitors include cathode ray tubes (col. 17, line 65-67), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have housed an electronic device comprising a cathode-ray tube, or a flat screen computer monitor (which is also a computer monitor), since the composition of Campbell et al. is suitable for use as a housing for various electronic devices such as a monitor housing as taught by Campbell et al.

In regard to claim 2, Campbell et al. teach that nylon-6 is a suitable material for the polyamide (col. 2, lines 7-20), so it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used nylon-6 as one of the polyamides of the blend of polyamides taught by Campbell et al. as discussed above in regard to claim 1.



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In regard to claim 3, Campbell et al. teach that nylon-6,6 is a suitable material for the polyamide (col. 2, lines 7-20), so it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used nylon-6,6 as one of the polyamides of the blend of polyamides taught by Campbell et al. as discussed above in regard to claim 1.

In regard to claim 4, Campbell et al. teach that the flame retardants (the phosphoramidate flame retardant and the adjunct flame retardant) are non-halogenated because Campbell et al. do not require that the flame retardants are non-halogenated (see, for example, col. 1, lines 44-65 and col. 13, line 8-col. 14, line 64).

In regard to claim 6, as discussed above in regard to claim 1, Campbell et al. teach that the composition of Campbell et al. is suitable for use as a housing for various electronic devices such as a monitor housing.

In further regard to claim 6, Campbell et al. teach the casing as discussed above in regard to claim 1, and that the casing is suitable for use as housings for various electronic devices (col. 17, line 58-col. 8, line 21) such as a television monitor housing and television backplates (col. 17, line 65-col. 18, line 2) and that television monitors include cathode ray tubes (col. 17, line 65-67), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have housed a television monitor, since the composition of Campbell et al. is suitable for use as a housing for various electronic devices such as a television monitor housing as taught by Campbell et al.

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8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell et al. (USPN 6,228,912), as evidenced by Christ et al. (USPN 5,567,797) as applied to claims 1 and 4 above, and in view of Nishihara (USPN 6,790,887).

Campbell et al. (and the additional evidence provided by Christ et al. USPN 5,567,797) teach the casing as discussed above in regard to claims 1 and 4. Campbell et al. teach that the composition may comprise a blend of polycarbonate and polyamides (col. 2, lines 3-21).

Campbell et al. fails to teach that the any of the flame retardants of Campbell et al. (the phosphoramidate flame retardant and the adjunct flame retardant) are melamine cyanurate.

Nishihara, however, disclose a flame resistant composition that comprises polycarbonate, polyamide and a flame retardant (col. 8, lines 32-43), and that melamine cyanurate is a preferred flame retardant (col. 18, line 66-col. 19, line 11 and col. 27, lines 5-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used melamine cyanurate as the adjunct flame retardant of Nishihara since melamine cyanurate is a suitable flame retardant for flame resistant thermoplastic compositions as taught by Nishihara.

### ***Response to Arguments***

9. Applicant's arguments presented in the Amendment filed May 19, 2009 in regard to the 35 U.S.C. 103 rejections of the claims have been fully considered but are not persuasive.

Campbell et al. (USPN 6,228,912) (and the additional evidence provided by Christ et al. USPN 5,567,797) teach the claimed article for the reasons of record in the updated rejection made of record in this Office Action.

### ***Conclusion***

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is (571) 272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 7:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter B Aughenbaugh /

Examiner, Art Unit 1794

7/29/09

/Rena L. Dye/

Supervisory Patent Examiner, Art Unit 1794